

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A sensor apparatus adapted to be used with milk extraction machinery, ~~[[said]]~~the milk extraction machinery including a plurality of extraction elements which when activated are adapted to deliver extracted milk from two or more extraction elements into ~~at least one~~a single collection line, comprising:

~~at least one~~a sensor associated with ~~the single~~said at least one collection line, wherein ~~said at least one~~the sensor is adapted to detect ~~the presence of~~a particular property of~~compound~~within the milk extracted, and

~~at least one~~a controller adapted to control the activation of ~~[[said]]~~the extraction elements,

whereby activation of ~~[[said]]~~the extraction elements is controlled to prevent ~~said at least one~~the sensor being exposed to extracted milk supplied from all of ~~[[said]]~~the extraction elements at any one time.

2. (Previously Presented) The sensor apparatus as claimed in claim 1 wherein the extraction machinery used with the sensor apparatus is dairy animal milking machinery.

3. (Previously Presented) The sensor apparatus as claimed in claim 1 wherein the extracted milk supplied by an extraction element is foremilk.

4. (Previously Presented) The sensor apparatus as claimed in claim 1 wherein an extraction element is formed from a single teatcup which includes a pulsator valve associated with a pulsation system.

5. (Previously Presented) The sensor apparatus as claimed in claim 4 which includes four extraction element teatcups associated with four independent pulsator lines.

6. (Currently Amended) The sensor apparatus as claimed in claim 1 wherein ~~[[a]]~~the single collection line collects all milk delivered from a single animal.

7. (Currently Amended) The sensor apparatus as claimed in claim 1 which includes ~~at least one~~the sensor integrated into a collection line.

8. (Previously Presented) The sensor apparatus as claimed in claim 1 wherein a sensor measures electrical conductivity.

9. (Currently Amended) The sensor apparatus as claimed in claim ~~[[1]]~~4 wherein ~~[[a]]~~the controller is formed by a pulsator controller of a dairy animal milking machine.

10. (Currently Amended) The sensor apparatus as claimed in claim 9 wherein ~~[[a]]~~the pulsator controller sequentially activates the pulsator valves of each teatcup.

11. (Previously Presented) The sensor apparatus as claimed in claim 10 wherein a single extraction element only is pulsated at one time.

12. (Previously Presented) The sensor apparatus as claimed in claim 10 wherein a pair of extraction elements are pulsated at one time.

13. (Currently Amended) The sensor apparatus as claimed in claim 1 wherein ~~[[a]]~~the controller allows a drainage delay period between activation of different extraction elements.

14. (Currently Amended) The sensor apparatus as claimed in claim ~~[[10]]~~1 wherein the ~~first~~ extraction element or elements initially activated by ~~[[a]]~~the controller are selected randomly.

15. (Previously Presented) The sensor apparatus as claimed in claim 9 wherein the pulsator valves of non-activated extraction elements are partially activated during extraction of milk from an activated extraction element.

16. (Currently Amended) The sensor apparatus as claimed in claim 15 wherein partial activation of an extraction element does not cause milk to be extracted and delivered to ~~at least one~~the single collection line.

17. (Currently Amended) The sensor apparatus as claimed in claim 1 which includes an indicator adapted to receive an output signal from the sensor, ~~[[said]]~~the indicator being

adapted to issue an alarm signal indicating abnormal milk has been delivered from an extraction element or elements.

18. (Previously Presented) The sensor apparatus as claimed in claim 17 which includes a diversion system associated with the indicator to isolate abnormal milk.

19. (Currently Amended) The sensor apparatus as claimed in claim 17 wherein milk abnormality is detected through a comparison of ratios ~~[[of]]~~between sensor output signals obtained from milk extracted from an alternative extraction element or elements.

20. (Previously Presented) The sensor apparatus as claimed in claim 17 wherein a rolling average of sensor readings is employed to detect abnormalities in extracted milk.

21. (Currently Amended) A controller adapted for use with extraction machinery, ~~[[said]]~~the extraction machinery including a plurality of extraction elements which when activated are adapted to deliver an extracted milk from two or more extraction elements into at ~~least one~~a single collection line,

wherein the controller is adapted to control the activation of ~~[[said]]~~the extraction elements to prevent milk supplied from all extraction elements entering ~~said at least one~~the single collection line at any one time.

22. (Currently Amended) The controller as claimed in claim 21, ~~[[said]]~~the controller being adapted to activate a pulsator valve associated with each extraction element wherein each pulsator valve is associated with a single independent pulsator line.

23-25 (Canceled)